## **Amendment to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

## **Listing of Claims:**

- 1. (Currently Amended) A projection system comprising:
  - a projection display;
  - at least one light source; and

a sensor means for sensing and compensating for changes in the luminous flux emitted by the at least one light source, wherein the at least one light source is configured to have a focal plane situated at an entering face of a rod integrator of the projection system, the rod integrator being positioned in between the at least one light source and the projection display, wherein the focal plane of the at least one light source is subject to change or shift due to instabilities of the at least one light source, wherein light emitted from the at least one light source comprises [[a]] first and [[a]] second spatial components (I) and (R) at the entering face which impinge on an (i) a central transparent first region and (ii) a second mirrored region, surrounding the first region, respectively, of the entering face of an optical component of the projection system the rod integrator and wherein the light emitted from the at least one <u>light source further comprises</u> a third spatial component (M) which <u>fails to impinge on</u> the entering face and instead is directed (iii) into a region immediately surrounding the entering face, and wherein the sensor means comprises at least one a sensor arrangement for sensing configured in a region of the entering face to sense, along a circumference of the rod integrator with weightings that are as equal as possible, the third spatial component of the light from the light source that is directed into the region immediately surrounding the entering face of the optical component of the projection system.

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2. (Previously Presented) A projection system as claimed in claim 1, further comprising a driver means for driving the projection display, wherein the driver means is controlled by the sensor arrangement to compensate for fluctuations in the luminous flux.

- 3. (Previously Presented) A projection system as claimed in claim 1, further comprising a power supply unit of the at least one light source, wherein the power supply unit is controlled by the sensor arrangement to compensate for the fluctuations in the luminous flux.
- 4. (Previously Presented) A projection system as claimed in claim 1, wherein the sensor arrangement comprises a plurality of sensors arranged proximate the entering face and along the circumference of the optical component and wherein the plurality of sensors are directed at the light source.
- 5. (Currently Amended) A projection system as claimed in claim 1, wherein the sensor arrangement comprises an optical waveguide structure, proximate to and surrounding the entering face of the optical component rod integrator, to couple in incident light corresponding to the third spatial component of light from the light source—(10), and at least one sensor to sense the third spatial component of light that is coupled in.
- 6. (Currently Amended) A projection system as claimed in claim 1, wherein the sensor arrangement comprises a surface, proximate to and surrounding the entering face of the optical component rod integrator, to scatter incident light corresponding to the third spatial component of light coming from the light source, and a sensor to sense the third spatial component of light that is scattered.

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7. (Previously Presented) A projection system as claimed in claim 6, wherein further the sensor is arranged substantially next to the light source in a direction perpendicular to the direction of propagation of the light produced by the light source.

- 8. (Currently Amended) A projection system as claimed in claim 1, wherein the optical component comprises a rod integrator is further configured for homogenizing the first and second spatial components of light produced by the light source which impinge on the entering face of the optical component rod integrator.
- 9. (Previously Presented) A projection system as claimed in claim 1, further comprising a color display for sequential color representation and, as a light source, at least one high-pressure gas-discharge lamp operated by alternating current.